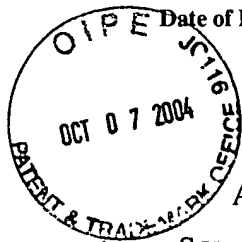


Express Mail Label No.: EV 328186731 US

Date of Deposit: October 7, 2004

Attorney Docket No.: 23239-544



10-08-08 JFW

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICANTS : Keefe, et al.  
SERIAL NUMBER : 10/729,581 EXAMINER : Not Yet Assigned  
FILING DATE : December 3, 2003 ART UNIT : 1645  
FOR : METHOD FOR IN VITRO SELECTION OF 2'-SUBSTITUTED  
NUCLEIC ACIDS

**Mail Stop Amendment**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Pursuant to the duty of disclosure under 37 C.F.R. §§1.56, 1.97 and 1.98, Applicants hereby make of record the documents listed on the attached modified Form PTO-1449, as well as copies of the listed documents.

This Information Disclosure Statement is being filed before the mailing date of a first Office Action based on the merits in the above-identified case. Accordingly, no fee or certification is believed required. By the waiver of 37 CFR 1.98(a)(2)(i) copies of the U.S. Patents A1-A29 are not submitted.

It is respectfully requested that the Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims, and sign the enclosed form PTO-1449 to evidence that the cited information has been fully considered by the Patent and Trademark Office during the examination of this application.

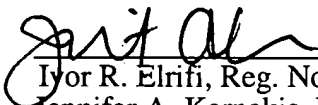
By submitting this Information Disclosure Statement, the Applicants make no representation that: (1) a search has been performed, of the extent of any search performed, or that more relevant information does not exist; (2) the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b); and (3) the information cited in the Statement is, or is considered to be, in fact, prior art as defined by 35 U.S.C. §102.

APPLICANTS: Keefe, et al.  
U.S.S.N.: 10/729,581

Notwithstanding any statements by the Applicants, the Examiner is urged to form his/her own conclusion regarding the relevance of the cited information. An early and favorable action is hereby requested.

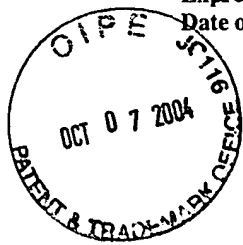
Please charge any fees that may be due, or credit any overpayment of same, to Deposit Account No. 50-0311, Reference No. 23239-544.

Respectfully submitted,

  
Ivor R. Elrifi, Reg. No. 39,529  
Jennifer A. Karnakis, Reg. No. 53,097  
Attorneys for Applicants  
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**Customer No. 30623**

Date: October 7, 2004

TRA 1961790v1



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICANTS : Keefe, et al.  
SERIAL NUMBER : 10/729,581 EXAMINER : Not Yet Assigned  
FILING DATE : December 3, 2003 ART UNIT : 1645  
FOR : METHOD FOR IN VITRO SELECTION OF 2'-SUBSTITUTED  
NUCLEIC ACIDS

**Mail Stop Amendment**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**TRANSMITTAL LETTER**

Transmitted herewith for filing in the present application are the following documents:

1. Information Disclosure Statement (2 pages), in duplicate;
2. Modified Form 1449/PTO (3 pages), in duplicate;
3. Copies of Cited References: B1-9; C1-54; and
4. Return Postcard.

If the enclosed papers are considered incomplete, the Mail Room and/or the Application Branch is respectfully requested to contact the undersigned at (617) 542-6000, Boston, Massachusetts.

The Commissioner is authorized to charge any fees that may be due, or to credit any overpayment, to the undersigned's account, Deposit Account No. 50-0311 Ref. No. 23239-544.

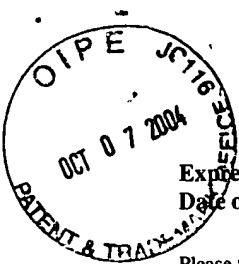
A duplicate copy of this transmittal letter is enclosed herewith.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Ivor R. Elrifi".

Ivor R. Elrifi, Reg. No. 39,529  
Jennifer A. Karnakis, Reg. No. 53,097  
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Date: October 7, 2004



Express Mail Label: EV 328186731 US  
Date of Deposit: October 7, 2004

Page 1 of 3  
Attorney Docket No.: 23239-544

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<b>Modified Form 1449/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)	<b>Application Number</b>	10/729,581
	<b>Filing Date</b>	December 3, 2003
	<b>First Named Inventor</b>	Keefe
	<b>Group Art Unit</b>	1645
	<b>Examiner Name</b>	Not Yet Assigned
	<b>Attorney Docket Number</b>	23239-544

U.S. PATENT DOCUMENTS							
Exam Initials	Cite No.	U.S. Patent Document No.	Issue Date	Name of Patentee(s) or Applicant(s)	Class	Sub Class	Filing Date If Appropriate
	A1	3,710,795	01/16/73	Higuchi et al.	128	260	
	A2	5,262,564	11/16/93	Kun et al.	562	430	
	A3	5,270,163	12/14/93	Gold et al.	435	6	
	A4	5,475,096	12/12/95	Gold et al.	536	23.1	
	A5	5,567,588	10/22/96	Gold et al.	435	6	
	A6	5,580,737	12/03/96	Polisky et al.	435	6	
	A7	5,582,981	12/10/96	Toole, et al.	435	6	
	A8	5,589,332	12/31/96	Shih et al.	435	6	
	A9	5,637,459	06/10/97	Burke et al.	435	6	
	A10	5,648,214	07/15/97	Nieuwlandt et al.	435	6	
	A11	5,660,985	08/26/97	Pieken et al.	435	6	
	A12	5,668,265	09/16/97	Nadeau, et al.	536	23.1	
	A13	5,672,695	09/30/97	Eckstein et al.	536	24.5	
	A14	5,683,867	11/04/97	Biesecker et al.	435	6	
	A15	5,698,687	12/16/97	Eckstein et al.	536	25.3	
	A16	5,705,337	01/06/98	Gold et al.	435	6	
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	A18	5,756,291	05/26/98	Griffin, et al.	435	6	
	A19	5,763,177	06/09/98	Gold et al.	435	6	
	A20	5,817,635	10/06/98	Eckstein et al.	514	44	
	A21	5,834,186	11/10/98	George, et al.	435	6	
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	A27	6,051,698	04/18/00	Janjic et al.	536	24.31	
	A28	6,107,037	08/22/00	Sousa et al.	435	6	
	A29	6,300,074 B1	10/09/01	Gold et al.	435	6	

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Exam Initials	Cite No.	Foreign Patent Document Office	Number	Name of Patentee(s) or Applicant(s)	Date of Publication	Translation Yes	No
	B1	WO	92/07065	MAXPLANCK-GESELLSCHAFT ZUR FÖRDERUNG DER WISSENSCHAFTEN	04/30/92		
	B2	WO	98/08974	INTELLIGENE LTD.	03/05/98		
	B3	WO	98/18480	NEXSTAR PHARMACEUTICALS, INC.	05/07/98		
	B4	WO	98/27104	YALE UNIVERSITY	06/25/98		
	B5	WO	99/31276	NEXSTAR PHARMACEUTICALS, INC.	06/24/99		
	B6	WO	00/70329	BRANDEIS UNIVERSITY	11/23/00		
	B7	WO	01/66721 A2	RIBOZYME PHARMACEUTICALS, INC.	09/13/01		
	B8	WO	02/22882 A2	ARCHEMIX CORPORATION	03/21/02		
	B9	WO	03/014375 A2	ARCHEMIX CORPORATION	02/20/03		
OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS							
Exam Initials	Cite No.	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.					
	C1	Bock et al. <i>Nature</i> , 355:564-566 (1992)					
	C2	Breaker R.R. <i>Curr. Opin. Biotech.</i> , 7:442-448 (1996)					
	C3	Breaker R.R. <i>Chem. Rev.</i> , 97:371-390 (1997)					
	C4	Breaker R.R. <i>Curr. Opin. Chem. Biol.</i> , 1:26-31 (1997)					
	C5	Breaker R.R. <i>Nat. Biotech.</i> , 15:427-431 (1997)					
	C6	Breaker R.R. Intracellular Ribozyme Applications in Principles and Protocols, pgs. 1-19; Horizon Scientific Press, Wymondham UK, Rossi and Couture, eds., (1999)					
	C7	Breaker R.R. <i>Curr. Opin. Biotech.</i> , 13:31-39 (2002)					
	C8	Briebe et al. <i>Biochem.</i> , 39:919-923 (2000)					
	C9	Carmi et al. <i>Chem. &amp; Biol.</i> , 3:1039-1046 (1996)					
	C10	Cotten et al. <i>Nucl. Acids Res.</i> , 19(10):2629-2635 (1991)					
	C11	DeAnda et al. <i>Ann. Thorac. Surg.</i> , 58:344-350 (1994)					
	C12	Froehler et al. <i>Nucl. Acids Res.</i> , 14(13):5399-5407 (1986)					
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	C15	Graham et al. <i>Nucl. Acids Res.</i> , 21(16):3737-3743 (1993)					
	C16	Griffin et al. <i>Blood</i> , 81(12):3271-3276 (1993)					
	C17	Hamaguchi et al. <i>Anal. Biochem.</i> , 294:126-131 (2001)					
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	C19	Hirose et al. <i>Tet. Lett.</i> , 28:2449-2452 (1978)					
	C20	Hobbs et al. <i>Biochem.</i> , 12(25):5138-5145 (1973)					
	C21	Jenne et al. <i>Nat. Biotech.</i> , 19:56-61 (2001)					
	C22	Koizumi et al. <i>Nucl. Acids Symp. Ser.</i> , 42:275-276 (1999)					
	C23	Koizumi et al. <i>Nat. Struct. Biol.</i> , 6(11):1062-1071 (1999)					
	C24	Lee et al. <i>Pharmac. Res.</i> , 12(12):1943-1947 (1995)					
	C25	Li et al. <i>Blood</i> , 83(3):677-682 (1994)					

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Exam Initials	Cite No.	Foreign Patent Document Office Number	Name of Patentee(s) or Applicant(s)	Date of Publication	Translation Yes No
	C26	Li et al. <i>Curr. Opin. Struct. Biol.</i> , 9:315-323 (1999)			
	C27	Li et al. <i>Proc. Natl. Acad. Sci. USA</i> , 96:2746-2751 (1999)			
	C28	Marshall et al. <i>Nat. Struct. Biol.</i> , 6(11):992-994 (1999)			
	C29	Paborsky et al. <i>J. Biol. Chem.</i> , 268(28):20808-20811 (1993)			
	C30	Padilla et al. <i>Nucl. Acids Res.</i> , 30(24):e138 (2002)			
	C31	Potyralo et al. <i>Anal. Chem.</i> , 70:3419-3425 (1998)			
	C32	Robertson et al. <i>Nucl. Acids Res.</i> , 28(8):1751-1759 (2000)			
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	C34	Robertson et al. <i>Nat. Biotech.</i> , 19:650-655 (2001)			
	C35	Sassanfar et al. <i>Nature</i> , 364:550-553 (1993)			
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	C37	Seiwert et al. <i>Chem. &amp; Biol.</i> , 7:833-843 (2000)			
	C38	Shaw et al. <i>Pharmac. Res.</i> , 12(12):1937-1942 (1995)			
	C39	Sood et al. <i>Nucl. Acids Res.</i> , 4(8):2757-2765 (1977)			
	C40	Soukup et al. <i>Proc. Natl. Acad. Sci. USA</i> , 96:3584-3589 (1999)			
	C41	Soukup et al. <i>RNA</i> , 5:1308-1325 (1999)			
	C42	Soukup et al. <i>Structure</i> , 7(7):783-791 (1999)			
	C43	Soukup et al. <i>Tren. Biotech.</i> , 17:469-476 (1999)			
	C44	Soukup et al. in <i>Ribozyme Biochem. Biotech.</i> , Eaton Publishing, Chapter 8, pgs. 149-170, Krupp & Gaur, eds. (2000)			
	C45	Soukup et al. <i>RNA</i> , 7:524-536 (2001)			
	C46	Soukup et al. <i>J. Mol. Biol.</i> , 298:623-632 (2000)			
	C47	Sproat et al. <i>Nucl. Acids Res.</i> , 19(4):733-738 (1991)			
	C48	Tang et al. <i>Chem. &amp; Biol.</i> , 4:453-459 (1997)			
	C49	Tang et al. <i>Nucl. Acids Res.</i> , 26(18):4214-4221 (1998)			
	C50	Tang et al. <i>RNA</i> , 3:914-925 (1997)			
	C51	Tsiang et al. <i>J. Biol. Chem.</i> , 270(28):16854-16863 (1995)			
	C52	Tucker et al. <i>Chromatography B</i> , 732:203-212 (1999)			
	C53	Wang et al. <i>Biochem.</i> , 32:1899-1904 (1993)			
	C54	International Search Report for PCT/US03/38733, mailed September 7, 2004			

\* a copy of this reference is not provided as it was previously cited by or submitted to the office in a prior application, Serial No. \_\_\_\_\_, filed \_\_\_\_\_, and relied upon for an earlier filing date under 35 U.S.C. §120 (continuation, continuation-in-part, and divisional applications).

Examiner Signature		Date Considered	
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.